

DOCKET NO: 292904US0PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
TOMOSHIGE UMEDA, ET AL. : EXAMINER: SAYALA CHHAY A.  
D.  
SERIAL NO: 10/584,494 :  
FILED: MARCH 5, 2007 : GROUP ART UNIT: 1761  
FOR: PET FOOD :

DECLARATION UNDER 37 C.F.R §1.132

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Tomoshige Umeda states that:

1. I am Tomoshige Umeda. I am a named inventor of the above-identified application.
2. I am a graduate of Graduate school of Science and Engineering, Tokyo Institute of Technology and received my Master of Science degree in the year 1987.
3. I have been employed by Kao Corporation for 21 years as a researcher in the field of food and beverage for human beings and animals.
4. The following experiments were performed by me or under my supervision.
5. The following experiments demonstrate an advantage of the claimed pet food.

Specifically, Example A shows an improvement of the long-term skin and hair health conditions as well as a surprising long-term anti-obesity effect, while Example B shows an improvement of a long-term skin and hair health conditions.

6. Each diacylglycerol-containing plant oil having the composition as shown in Table 1' was added with 0.6 wt% (60000 ppm) of ascorbic acid palmitate based on the oil to provide a blended oil, and each pet food was then produced in accordance with the formulation as shown in Table 2'.

Table 1'

Composition of fatty acid in diacylglycerol-containing plant oil	Example A (wt%)	Example B (wt%)
C16:0	19.10	11.50
C16:1	4.10	2.30
C18:0	4.60	3.50
C18:1	39.60	40.40
C18:2	27.90	35.60
C18:3 (n-3)	2.40	4.60
C20:0	0.20	0.20
C22:0	0.10	-
C22:1	0.30	-
C24:0	0.20	-
C24:1	0.10	-
MAG	0.00	0.70
DAG	23.50	47.70
TAG	76.50	51.50
Fatty acid having two or more double bonds	30.30	40.20

Table 2'

Materials for pet food	Example A		Example B	
	Amount added (wt%)		Amount added (wt%)	
Chicken meat and chicken meal	34		34	
Plant protein	9		9	
Cereal (barley, corn, sorghum)	40		40	
Beet pulp	5		5	
Blended oil	7		7	
Minerals <sup>1</sup>	3		3	
Vitamins	2		2	
Evaluation	Improved (%)	No change (%)	Improved (%)	No change (%)
Skin condition	24	71	7	89
Hair condition	15	21	29	71
Anti-obesity effect	90 (total percentage)		-	

<sup>1</sup>Total amounts of cooper, iron, manganese and cobalt in the minerals of Examples A and B were 1.13 wt% and 1.17wt%, respectively.

## 7. Example A

A pet food having the formulation of Example A as shown in Table 2' was prepared. Twenty one obese dogs were each fed with a specific amount of the pet food three times per day for eight weeks to evaluate skin and hair conditions, as well as an anti-obesity effect thereof. After the feeding, the dogs' owners were asked whether their dogs had changed, improved or had no change. Each percentage of the evaluation was calculated by dividing the number of owners who answered that their dog had been improved or had no change by the total number of the owners (21) and multiplying the resultant value by 100. If there is an owner who did not answer, the number thereof is subtracted from the total number of the owners (21).

8. Example B

The pet food having the formulation of Example B as shown in Table 2' was prepared. Nine nonobese dogs and nineteen obese dogs were each fed with the pet food freely for 3 weeks to evaluate their skin and hair conditions. After the feeding, their owners were asked whether their dogs had changed, improved or had no change. Each percentage of the evaluation was calculated by dividing the number of owners who answered that their dogs had been improved or had no change by 28 and multiplying the resultant value by 100. If there is an owner who did not answer, the number thereof is subtracted from the total number of the owners (8).

9. Applicants have found that because the evaluation results in Examples A and B were "Improved" or "No change", the claimed pet food yields excellent benefits in terms of the skin and hair health conditions, as well as the anti-obesity effect over a long period of time.

10. Under penalty of perjury under the laws of the United States of America that the foregoing is believed to be true and correct.

Application No. 10/584,494  
Declaration under 37 CFR 1.132

Zomshige Umeda  
Signature

12. Feb. 2009  
Date